

CLAIMS

What is claimed is:

1. A cursor control device comprising:

An input signal reader adapted to read an input signal created by movement of a surface across the input signal reader; a signal processing component adapted to process the input signal from the reader and to communicate a corresponding signal to a controller, wherein the corresponding signal is directly proportional to the input signal; wherein the device maintains a substantially constant position relative to an active hand of a person when the person is using the active hand to operate a second device.

2. The cursor control device of Claim 1, wherein the device is hand-held.
3. The cursor control device of Claim 1, wherein the input signal reader is an optical reader.
4. The cursor control device of Claim 3, wherein the device is hand-held.
5. The cursor control device of Claim 1, wherein the device is embodied in a substantially T-shaped body.
6. The cursor control device of Claim 5, wherein the device is hand-held.
7. The cursor control device of Claim 1, wherein the input reader is a touch-pad.
8. The cursor control device of Claim 1, wherein the input reader is a track ball.
9. The cursor control device of Claim 1, wherein the surface is human skin.

10. The cursor control device of Claim 7, wherein the skin is on a thumb of the active hand of a person.
11. The cursor control device of Claim 8, wherein the skin is on a thumb of the active hand of a person.
12. The cursor control device of Claim 1, wherein the surface is worn on a thumb of the active hand of a person.
13. The cursor control device of Claim 1, wherein the device is ergonomic.
14. The cursor control device of Claim 1, wherein the device has been designed and shaped to be compact and sleek thus providing for the three dimensional space requirements required for integrated hand, mouse and keyboard usage.
15. The cursor control device of Claim 1, wherein an attachable and detachable hook and loop type holding system maintains said hand held cursor control device in proper position.
16. The cursor control device of Claim 1, wherein the device may be removably secured to the hand by a strap, glove, or other suitable means, or any combination thereof.
17. The cursor control device of Claim 1, wherein the device can communicate to the controller using well known wired communications (such as USB or parallel) or wireless communications protocols.
18. The cursor control device of Claim 1, wherein one or more switches are incorporated on said device so as to provide well-known integrated and auxiliary functions.

19. The ergonomic and functional architecture for an electronic mouse, as shown and described in claims 1-16.
20. FIG. 1 -12 are ergonomic and functional architecture views thereof;